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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/055,120	01/21/2002	Oscar E. Agazzi	47536/SDB/B600	8931
23363	7590	04/22/2005	EXAMINER	
CHRISTIE, PARKER & HALE, LLP			CORRIELUS, JEAN B	
PO BOX 7068			ART UNIT	
PASADENA, CA 91109-7068			PAPER NUMBER	
			2637	

DATE MAILED: 04/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/055,120	Applicant(s) AK AGAZZI, OSCAR E.	
	Examiner Jean B Corrielus	Art Unit 2631	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 43-46, 48, 49 and 51-57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 43, 45, 46 and 57 is/are rejected.
- 7) ☒ Claim(s) 44, 48, 49 and 51-56 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The finality of the rejection of the last Office action is withdrawn in view of the following new ground of rejection(s).

Allowable Subject Matter

2. The indicated allowability of claim 43 is withdrawn in view of the newly discovered reference(s) to Onoda et al, US Patent No. 5,317,602. Rejections based on the newly cited reference(s) follow.

Claim Objections

3. . Claims 43-46, 48-49 and 51-57 are objected to because of the following informalities: claim 43, line 7, "corresponding" should be replaced by "set of" so as to be consistent with antecedent; the same comment applies to lines 9 and 14; claim 48, lines 10,12 and 17; claim 51, lines 10, 12 and 17; claim 52, lines 7, 10, and 15; claim 55, line 7, 9 and 16; and claim 56, lines 7, 9, and 18; claim 43, line 10, "corresponding" should be deleted; the same comment applies to claim 48, line 13; claim 51, lines 13; claim 52, line 11.; claim 55, line 10 and claim 56, line 10. Note that any claim whose base claim is objected is likewise objected. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 45, 46 and 57 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 45, lines 2-3, "the phase control signals" lacks of proper antecedent basis.

The same comment applies to claim 46 because of its dependency to claim 45.

Claim 57, line 2, "the integrated sum" lacks of proper antecedent basis.

Terminal Disclaimer

6. The terminal disclaimer filed on 4/6/05 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of US Patent No. 6,771,725 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Brede et al US Patent No. 5,726,607 in view of Kyles US Patent No. 6,028,462 further in view of Onoda et al US Patent No. 5,317,602.

Brede et al discloses a timing recovery system (fig. 3) for generating a set of clock signals (150 and 160) in a processing system the set of clock signals comprising a set of sampling clock signals (see fig. 1, output of divider 114) the processing system (fig. 3) comprising a set of processing subsystems (100a and 110b), each of the processing subsystems comprising an analog section (fig. 1 and col. 13, lines 8-9), each of the analog sections operating in accordance with a corresponding one of the sampling clock signals (provided to element 116 and feedback to device 114), the timing recovery comprising a set of phase detectors (106)(Note that at col.13, lines 8-9, that Brede et al teaches that the PLL 100a is identical to PLL 100b, therefore, each element of set of devices uses the same reference number) generating phase errors for the corresponding sampling clock signals, a set of loop filters (108) coupled to the corresponding phase detectors (106), the loop filters (108) receiving the corresponding phase errors and generating filtered phase errors, a set of digital to analog converters (110) coupled to the loop filters (108), the D/A converters (110) receiving the filtered phase errors and generating analog filtered phase error; a set of oscillators (112) coupled to the corresponding D/A converters (110), the oscillators 112 receiving the analog filtered phase errors and generating the sampling clock signals. However, Brede does not explicitly teach that the signals generated by the PLL are transmitted to respective subsystems. It also fails to teach that each subsystem includes a digital section operating in accordance with a clock signal supplied from the set of clock signals. Kyles teaches a pair of PLL generating a pair of clock signals (sampling clocks) transmitted to respective subsystems see

Art Unit: 2637

col. 1, lines 48-67. It would have been obvious to one skill in the art to incorporate such a teaching in Brede et al in order to synchronize the transfer of data into the transmitter and to synchronized the recovered data signal from the receiver. see col. 1, lines 53-55 and lines 65-67. In addition, Onoda et al further teaches a processing system (fig. 5) having a set of processing subsystems formed by signal paths (51, 55, 57 59 and 60) and signal path (52, 56, 58, 59 and 61) each comprises a digital section see for instance 60 and 61 coupled to an analog section, respectively, wherein a set of clock signals comprises a (receive) clock signal (d) inputted to each digital section 60 and 61, respectively. See fig. 5. Given that fact, it would have been obvious to one skill in the art to incorporate such a teaching in Brede and Kyles so as to improve data detection.

Allowable Subject Matter

9. Claim 44 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. Claims 45 and 46 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

11. Claims 48-49 and 51-56 would be allowable if amended to overcome the objection sets forth above.

Art Unit: 2637


12. Claims 57 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean B Corrielus whose telephone number is 571-272-3020. The examiner can normally be reached on Maxi-Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on 571-272-3086. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jean B Corrielus
Primary Examiner
Art Unit 2637

4-19-05